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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,664

03/31/2006

Tsuneyuki Kikuchi

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT

PAPER NUMBER

2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,664	Applicant(s) KIKUCHI, TSUNEYUKI	
	Examiner MELODY MEHRPOUR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/09/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed reference listed in the information Disclosure Submitted on 10/09/08 have been considered by the examiner (see attached PTO-1449

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-26**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzara (US publication 2003/0087643 A1) in view of Haartsen (US Publication 2005/00489895).

Regarding claims 1, 10, 11,26, Mazzara teaches a wireless line sharing network system in a mobile communication network system capable of a plurality of communications at licensed radio frequencies, comprising:
a plurality of user terminals that subscribe to a plurality of communication carriers, respectively (0024, 0025, 0026);

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a plurality of wireless base stations capable of communicating with the respective user terminals at the radio frequencies (0025, 0026);

a control station for controlling the wireless base stations and connecting each of the user terminals to a corresponding communication carrier network (0041); and

a call acceptance controller for, when there is a request for call connection to a user terminal, accepting the call as well as reserving bandwidth in response to the call connection request based on at least carrier band information indicating radio

bandwidth allocation patterns defined by the respective communication carriers on a contract and carrier use condition information indicating the current use conditions of the bandwidth of the respective communication carriers (0033, 0036, 0037). Mazzara inherently teaches updating the carrier use condition information (0009, 0010, 0011).

Mazzara does not specifically mention that the system comprising **a bandwidth change means for sequentially changing bandwidths allocated to call connected user terminals so that the used bandwidth of each of the communication carriers is in a predetermined range based on at least the carrier band information, the carrier use condition information and user use condition information indicating the current use conditions of the call connected ones of the user terminals**. However,

Haarsen teaches system comprising a bandwidth change means for sequentially changing bandwidths allocated to call connected user terminals so that the used bandwidth of each of the communication carriers is in a predetermined range based on at least the carrier band information, the carrier use condition information and user use condition information indicating the current use conditions of the call connected ones of

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the user terminals (0019, 0020). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Haarsen with Mazzara, in order to control the channel allocation and synchronization over variety of interfaces.

Regarding claims 2, 19, Mazzara teaches a wireless line sharing network system as claimed in claim 1, wherein the call acceptance controller updates the bandwidth reserved by using licensed band information of a communication carrier network corresponding to the user terminal concerning the call connection request (0035).

Regarding claim 3, Mazzara teaches a wireless line sharing network system as claimed in claim 1, further comprising a bandwidth determination means for determining bandwidth for the call connection request based on bandwidth commonly indicated in user support band information of the user terminal contained in the call connection request, licensed band information of a corresponding communication carrier network concerning the call connection request and carrier support band information on predetermined bands supported by the respective communication carriers with respect to each service (0041, 0042,).

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Regarding claims 4, 12, 20, Mazzara teaches a wireless line sharing network system wherein the bandwidth determination means includes:

a bandwidth list generation means for generating a list of at least one selectable bandwidth based on the user support band information, the licensed band information and the carrier support band information (0124,00146, 0148); and

a determination means for selecting bandwidth from the bandwidth list in descending order, and determining the selected bandwidth as bandwidth for the call connection request when the selected bandwidth is not greater than idle bandwidth obtained from the carrier use condition information (0093, 0148).

Regarding claims 6, 14, 22, Mazzara does not specifically mention that a wireless line sharing network system further comprising a bandwidth change means for sequentially selecting call connected user terminals in descending order of bandwidths allocated to the user terminals based on user use condition information, and changing the bandwidth allocated to the call connected user terminal so that the used bandwidth of each of the communication carriers is in a predetermined range according to the bandwidth list corresponding to the selected user terminal. However, Haarsen teaches a wireless line sharing network system further comprising a bandwidth change means for sequentially selecting call connected user terminals in descending order of bandwidths allocated to the user terminals based on user use condition information, and changing the bandwidth allocated to the call connected user terminal so that the used bandwidth of each of the communication carriers is in a predetermined range according to the

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bandwidth list corresponding to the selected user terminal (0019, 0020). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Haarsen with Mazzara, in order to control the channel allocation and synchronization over variety of interfaces.

Regarding claims 7, 15, 23, Mazzara teaches a network system as claimed in claim 1, further comprising a mediator controller for, in the case where bandwidth cannot be reserved for the call connection request, mediating between a communication carrier with insufficient bandwidth and a communication carrier with excess bandwidth based on the carrier band information and the carrier use condition information so that the communication carrier with excess bandwidth leases idle bandwidth to the communication carrier with insufficient bandwidth (0042, 0043).

Regarding claims 8, 16, 24, Mazzara teaches a network system as claimed in claim 1, further comprising a mediator controller for, in the case where the use of radio bandwidth exceeds the predetermined percentage of the radio bandwidth defined by contract in a communication carrier, mediating between the communication carrier with insufficient bandwidth and a communication carrier with excess bandwidth so that the communication carrier with excess bandwidth leases idle bandwidth to the communication carrier with insufficient bandwidth (0041, 0042, 0043, 0048).

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Regarding claims 9, 17, 25, Mazzara teaches a network system as claimed in claim 1, further comprising an accounting controller for charging each of the communication carriers based on the lease agreement concluded with the carrier (0006, 0010, 0011).

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 6-12, 14-20, 22-26, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached (571) 272-7023.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Naghmeh Mehrpour/

Primary Examiner, Art Unit 2617

Feb 23, 2009